# THE TECH

DAILY

VOL. XXIX. NO. 62. BOSTON, MASS., FRIDAY, DECEMBER 10, 1909 PRICE ONE CENT


## PRES. LUCIUS TUTTLE SPEAKS AT UNION TONIGHT

### Is Well Known as Eminent Railroad Authority---Topic Not Posted

Lucius Tuttle, president of the Boston and Maine Railroad, will speak at the Union tonight. Mr. Tuttle is a self made man, having entered the railway service when he was nineteen years old, and rose from the ranks so rapidly that before he was fifty, he was made president of the B. & M. R. R. He is also a member of the Institute Corporation.

The subject of his talk, Mr. Tuttle decided not to give out, as he wants to have plenty of range, so that he may speak about the many different things of interest to Tech men. A large attendance is expected since Mr. Tuttle is so well knonw by the Institute students.

## 1911 CLASS DINNER

Tonight at the Union the class of 1911, will hold it's annual dinner. One of the most interesting features of the occasion will be the announcement of the result of the Prom Committee election, which closed yesterday. The dinner will be called at 6.30 P. M., sharp. After the dinner, which the steward has promised to make a winner, some of the prominent members of the faculty will speak.

Prof. Talbot and Bursar Rand are old favorites, and while Prof. Hayward has never before addressed the class, his popularity is so great that he is sure to be well recieved. In addition, Prof. Breed of the Civil Engineering Department has promised to speak, if he is able to get to the dinner.

The dinner will be run off with as little delay as possible to enable the class to adjourn upstairs, to hear Mr. Tuttle, the speaker of the evening. All in all the affair promises to be a great success, and every member of the class is urged to be present.

Tickets may be obtained during the day from any of the following men: C. F. Hobson, L. G. Fitzherbert, S. P. Kimball, S. B. Copeland, E. A. Nash, M. A. Crossman, W. C. Salisbury.

## SOPHOMORES ON THE TECH

A keen-eyed reporter of The Tech, made a tour of a few sophomore class rooms yesterday and tried to get a few personal opinions on the daily paper. From a number of sources opinions came fast and strong. It was with considerable pleasure that the reporter finally escaped from the danger zone and slowly found his way back to the editorial offices, with a handful of copy, of all colors ranging from a deep blue to a blood red.

The first man questioned was, P. L. Flansburg, who said that he read the Tech daily and enjoyed the Hornet's Nest and the college notes.

G. A. Swenson thinks, "The Tech is good, all right. General notes and college news interests me most."

A. S. Huddell modified his first statement by, "Its all right considering the time the bunch has to put on it. The Hornet's Nest is good and ought to go cracking things in general. It has started out well."

R. M. White, who buys it daily, "It strikes me, it is much better than last

(Continued on page 2.)

## DR. MACLAURIN IN ANNUAL REPORT ADVISES AN INCREASED ENDOWMENT

### A New Site Absolutely Essential For Increased Activity of an Institution of Technology Not Resting on Its Laurels

To the Members of the Corporation:—

I have the honor to present to you today a report upon the work of the Institute during the preceding year and upon some of the larger problems that must be dealt with in the future.

**Changes in the Corporation and Within the Institute.**

The Corporation has suffered the loss of two of its life members through the resignation of Mr. Francis Blake and Mr. David R. Whitney. These gentlemen have unfortunately found it necessary to resign after long and valued service and after displaying their keen interest in the welfare of the Institute in many practical ways. In accordance with the by-law limiting the number of life members to thirty-five as soon as the number shall have been reduced below that limit, the resignation of these two members left only one vacancy. This has been most happily filled by the election of Mr. Francis R. Hart, an alumnus of the Institute, who has already rendered signal service to his Alma Mater in the difficult and important post of Treasurer. The Institute has been peculiarly fortunate in a succession of able and devoted treasurers; but none could have worked more loyally and enthusiastically in its interests than Mr. Hart. Unfortunately the increasing load of work and responsibility imposed by the Corporation that has the first claim on his energies makes it impossible for him to continue to give to the treasurership the time and thought that in his judgment the difficulties of the position demand. He has therefore deemed it necessary to tender his resignation. To fill the vacancy thus caused the Executive Committee has been fortunate in securing the services of Mr. William B. Thurber, another distinguished alumnus of the Institute, who will bring to the task energy, enthusiasm, and the advantages of a wide business experience. His election is subject to your confirmation today.

The Corporation has welcomed to its membership three new term members, elected from the nominees of the Alumni Association—Messrs. Walter B. Snow, Theodore W. Robinson, and Charles R. Richards.

I should perhaps remind you that I was duly elected as President of the Institute towards the end of 1908, but that my obligations to Columbia University in the City of New York made it impossible to undertake the active duties of the position until the first of June, 1909. I was inaugurated with impressive ceremony on the 7th of June. The difficult period of the Institute's history since the resignation of Dr. Pritchett has been made memorable by a striking manifestation of the Technology spirit at its very best. Few men can realize what self-sacrifice is involved when a man of science of the front rank as an original investigator lays aside his chosen work and devotes all his time and thought and energy to administrative duties. You have already placed on record your appreciation of the services rendered by Dr. Noyes as Acting President; and I may add that his example can not fail to be a lasting and impressive reminder to his successors in the presidential office of the high standards that they must endeavor to maintain. I feel that it is an unusual honor to follow such a man and an unusual privilege to have him working beside me, always ready to put at my disposal his unrivaled knowledge of the whole field of the Institute's activities and his trained judgment as to its best interests.

During the year the changes within the Faculty have been as follows: Professor George F. Swain, Professor Harry E. Clifford, Professor Fred Wheeler, Associate Professor George C. Shaad, and Associate Professor William E. Mott have resigned. The vacant professorships of Civil Engineering, Theoretical and Applied Electricity, Military Science have been filled by the appointment of Professors Charles M. Spofford, Harold Pender, and Captain Alpha T. Easton. Professor William E. Wickenden has been appointed Assistant Professor of Electrical Engineering. The following promotions have been made within the Faculty: Associate Professors Louis Derr, Augustus H. Gill, William H. Lawrence and Arthur G. Robbins have been advanced to the grade of full professors; Assistant Professors Harry W. Gardner, Samuel W. Prescott, and Charles H. Warren to that of associate professors; and Instructor Clarence L. E. Moore to that of assistant professor.

In a number of cases these changes have involved the loss of instructors who were trained at the Institute and whose services to their Alma Mater have been very highly appreciated. Such losses are, however, inevitable in a great scientific school whose function it is, not only to educate engineers and architects, but to train men to import to other schools the Institute's most effective methods and ideals.

**Work of the Year.**

The work within the Institute during the year is clearly indicated by the heads of departments and other administrative officers in the reports that are appended. It will be seen from these that the year has been one of steady progress, not marked by any striking modification of the conditions or the methods of the previous year. The total number of students has risen slightly --from fourteen hundred and sixty-two to fourteen hundred and seventy-nine—the entering class being, with the exception of that of last year, the largest in the history of the Institute for more than ten years. The number of students coming from a great distance gives some measure of the reputation of a school, and is specially significant for this Institute whose fees are relatively very high. The number from beyond the borders of Massachusetts is at present six hundred and twenty-seven. Of these, seventy-nine come from thirty different foreign countries—China and Mexico being the largest contributors. The remaining five hundred and forty-eight are from forty-two states and two territories of the Union, the District of Columbia, Philippine Islands, Porto Rico, and the Canal Zone. The number of graduate students is two hundred; and they represent eighty-four colleges and universities. It is evident from this that our students live in a community whose members have been brought up in widely different conditions. They thus have the opportunity of a liberal education by the simple process of mixing with their fellows.

(Continued on page 3.)

## MONSTER CONVOCATION TO BE OPENED AT TECH

### American Assoc. for the Advancement of Science to Have Notable Week

Twenty seven different societies and associations affiliated with the American Association for the Advancement of Science have signified their intention of participating in the monster convocaton to be held in Boston the week of December 27th. At the opening session which will be held in Huntington Hall at 10 A. M. on Monday, December 27th, addresses will be made by Dr. David Starr Jordan, President of the meeting, President Maclaurin of the Institute and Dean Sabine of Harvard University.

Addresses by retiring Vice-Presidents, will be as follows: Monday, December 27. Vice-President Keyser on The sis of Modern Logistic; Vice-President Sumner on Social and Economic Science; Vice-President Willis on Geology and Geography; Vice-President Herrick on "The Evolution of Intelligence and its Organs." Tuesday, December 28: Vice-President Guthe on "Some Reforms Needed in the Teaching of Phisics; Vice-President Richards on "The Nature of Response to Chemical Stimulation"; Vice-President Howell on "Physiology and Experimental Medicine"; Vice-President Kahlbergan on "The Past and Future of the Study of Chemical Solutions." Wednesday, December 29: Vice-President Swain on "The Profession of Engineering and it's Relation to the American Associations for the Advancement of Science"; Vice-President Dewey on "Science as a Method of Thinking and Science as Information in Education"; Vice-President Woodworth on Racial Differences of Mental Traits."

Each section will have a day of session and will have a program of general interest in which will be included the address of its Vice-President. At half past eight, Monday evening the retiring President, Prof. T. C. Chamberlin, will give his address after which there will be a reception given by the local committee. On Tuesday evening, Dr. C. W. Stiles of the Public Health and Marine Hospital Service will give a lecture on "The Hookworm Disease in the South." On Wednesday evening, will occur the annual dinner of the American Society of Naturalists.

## 1913 BASKET BALL

The first game of the freshman Basket Ball team will be held at the Newton Y. M. C. A. at 3.30 P. M. There opponent is the Newton High School. The freshman have a strong team, made up of former high school stars.

The lineup of the freshman team will be: backs, W. P. Muther, C. J. McCarthy; center, H. F. Johnson; forwards, S. T. Croker and A. S. Darling. G. A. Cahill, J. Thompson, W. J. Halsey and C. S. Elwell, will also be taken along.

**CALENDAR.**

Friday, December 10.

| | |
|---|---|
| 1:00 | 1910 Class Meeting in H. H. |
| 1:00 | Hockey Meeting in 21 Rog. |
| 4:00 | Basket Ball Practice. |
| 4:00 | Wireless Meeting, 11 Eng. B. |
| 5:00 | Aero Club Meeting in Old Union, Mech. Lab. |
| 6:30 | Junior Class Dinner. |
| 7:00 | Phillips Exeter Dinner, American House. |
| 8:00 | Friday evening Entertainment. |

# THE TECH.

Published daily except Sunday during the college year by students of the Massachusetts Institute of Technology.

Entered as second class matter Sept. 29, 1909, at the post office at Boston, Mass., under the Act of Congress of March 3, 1879.

General Manager,
R. H. Ranger 1911

News Board.
D. P. Gaillard 1911 ....Editor-in-Chief
A. L. Fabens 1910 ....Institute Editor
J. I. Murray 1912 .....Athletic Editor
G. M. Keith 1912 ....Exchange Editor
N. McL. Sage 1912 .....Society Editor

Business Board.
N. DeForest 1911.....Business Manager
D. N. Frazier 1911, Circulation Manager
H. Merrill 1912 ...Advertising Manager

Advertising Associate,
R. M. Barton 1911 .. Asst. Adv. Mgr.

Circulation Associates.
S. C. Neff 1912 .....Mailing and Dist.
H. D. Kemp 1912 .....Posters
A. Yereance 1911 .....Notices
William Guild.

Friday Issue,
E. B. Moore 1912 .....Assoc. Editor

All communications regarding advertisements should be addressed to the Business Manager. Regarding subscriptions address the Circulation Manager.

Subscriptions within the Boston Postal District and outside of United States must be accompanied by postage at the rate of one cent for each copy.

Subscription $1.50 per year in advance
Single Copies 1 Cent.

Printed by Puritan Linotype, Boston

BOSTON, MASS., DECEMBER 10, 1909.


Dr. Maclaurin has sounded the keynote of the future Technology in his report to the Corporation printed today. To help him carry out these aims it is well to carefully read, understand and appreciate what his genius is planning.

The Point System is trying to do the square thing. Anybody can slam, but it takes a man to offer sensible criticism.

Christmas is coming. Time tables are being consulted. Tech will be a lonely spot for ten days. Men going to the same cities should plan to get together

The "esprit de corps" of the small reading room in the Union is not what it should be. Even the atmosphere needs purifying.

An instructor in "Mech" gave his class a treat this week by holding an informal discussion on the subject. Favors like this are greatly appreciated.

The student body is rejoicing that nobody was injured in the Bursar's office when the safe fell through the floor.

## SOPHOMORES ON THE TECH

(Continued from page 1.)

year. Looks pretty often as if they had hard time to fill up space."

W. Shuttleworth said, he refused to give his candid opinion by advice of council.

M. C. Mason was a bit hard to question, but has no fault to find with it, other than the Hornet's Nest, which he does not like.

L. M. Huggins, continued, "A few mistakes now and then will come up anyway. There is no use knocking a good thing. I like it."

H. L. Nickerson, said that he refused to be interviewed and would not talk.

G. W. Bakeman, "The general news is all right, the Hornet's Nest is a bit off color."

A number of other interviews were obtained but the blue pencil was very heavy on the copy and it was thought advisable to consign them to the waste-paper basket.

## COMMUNICATION

To the Editor of The Tech:

Being much interested in the student activities at the Institute and especially in athletics, I occasionally go over to the gym to watch various teams practice. The other day I happened to be there while the gym classes were at work, and noticed something which does not help very much towards giving Tech men a good name outside.

The faculty have provided this year, a pianist to supply music while the classes are at work. This helps a great deal in the exercises, giving the necessary rythm in a most agreeable way. This music has also supplied a large number of spectators with a little more enjoyment than the gymnasts alone would have done.

As a great many of the selections which are played on the piano are the popular numbers of the day, there is a great tendency to accompany the young lady with whistling. This act, has a great many faults. It not only spoils the order of the classes, but it interferes with the work of the instructors.

It would be a great misfortune if the faculty had to dispense with the music because it was so good that a few could not help from joining in. It was to be noticed also that it was not only the spectators that were to blame but a great number of the men that were in the class were also doing it. This of course, is not respectful, as no gentleman would think of whistling in a math. class, therefore it goes with out saying that he should not do it in a gym. class.

I think every man in the Institute is capable of taking a hint.

The Spectator.

To the Editor of The Tech:

In regard to a recent editorial in the Tech, concerning the locking of lecture-room doors at five minutes past the hour, Prof. Adams told his class in descriptive geometry, that he would prefer to leave the doors of the room open during a lecture, but that he had to close them for his own convenience.

He said, the fact that men come in late is not, in itself, necessarily a disturbance, but it is the fact that there are always ten or a dozen men who are only too ready to look around at the slightest distraction and try to draw the attention of the class to the late arrivals.

A man sometimes has a good reason for being late to a class, and it seems rather hard that he should be excluded from his section on account of the thoughtless conduct of his fellow students.

"Freshman"

Dear Sir:—

The Hornet's Nest in Tuesday's Tech called attention in a cleveer article to the short office hours and kind of notices sent out from the register's office. With nearly 1500 students here the office should be open a reasonable part of the day, especially when so many unnecessary notices are sent out. Why isn't the bursar's office also open only an hour a day except on one day and at 1.45 P. M. except some other day? If the registrar cannot give more time to the students he could have assistants in charge at other hours. As a person cannot be in two placees at once, why not notice the conflict on the schedule at the office without sending notices to explain absence? The convenience of the students should be considered enough to have longer office in keeping their records.

1910


You can't say whether or not a glove is economical till it's worn out. Try the wear of

**FOWNES GLOVES**

HAVE YOU TRIED THEM?

**TASHA** Turkish Cigarettes

They are fine in flavor and smooth.
The most perfect blend you ever smoked.

15 CENTS PER PACKAGE OF 10.

Try a box TODAY and see for yourself.
In Packages of 100 at $1.25 make a Christmas Gift that will be appreciated and enjoyed.
ESTABROOK & EATON, Distributors.
On Sale at the Cage.

**OWN A TYPEWRITER**

If you haven't the cash we sell you one on

**EASY PAYMENTS**

WE HAVE ALL MAKES AND ALL PRICES

**MODEL TYPEWRITER INSPECTION CO.**

165 DEVONSHIRE STREET 26 ARCH STREET

**OLD COLONY TRUST COMPANY**

Capital and Surplus, $7,500,000.00

**Main Office, Court Street**

**Branch Office, Temple Place**

SAFE DEPOSIT VAULTS AT BOTH OFFICES

and woolens that are specially selected for college men can be seen at either of my stores at any time, and opposite Tech. Union Tuesday's from 12 to 2.30. A students' tailor 14 years.

**L. Pinkos**

9 STATE STREET BOSTON
HARVARD SQUARE CAMBRIDGE

# DR. MACLAURIN'S REPORT

(Continued from page 1.)

Unfortunately the conditions under which they live do not make it possible to take advantage of such opportunil ties to the full.

An important step in the development of the social life of the students was taken last year and referred to in the report of the Acting President. This was the opening of the new Technology Union designed to serve the purpose of a students' club house. It has continued throughout this year to be the center of social life amongst the students and has contributed largely to the marked increase of social activities that is referred to by the Dean in his report. The successful management of the dining room at the Union has proved a problem of considerable difficulty and one that has not yet been solved in a thoroughly satisfactory manner. The health of the students as a whole continues excellent, and it is particularly gratifying to find that their health seems to improve steadily as they stay longer at the Institute. Interesting statistics on this matter are given by the Dean and Medical Adviser; and from these it appears that the very hard work that the Institute demands from its sudents is a good thing for them physically as well as mentally.

The most important change in the carrying on of our work during the year has been the establishment of a separate course in Electro-chemistry. The purpose and leading features of this course are lucidly set forth in the report of Professor Cross.

Besides doing the regular work of instruction, several of the departments have devoted a considerable share of their resources and energies to the conduct of scientific research. This has for some time been a marked feature of the Institute, and it is of the first importance that it should be maintained. Doubtless in various schools many educational sins have been committed in the name of research; but there can be no question that the spirit of research is the very breath of life to a scientific school. The Institute has been peculiarly fortunate in having on its faculty men who recognize this thoroughly; and it is not a little remarkable that many of the most important contributions to pure science that have been made within recent years in America have been made by graduates of the Institute of Technology, which on its scientific side is popularly, although of course quite erroneously, supposed to be almost exclusively a school of applied science. It is interesting, too, to note that a number of the gifts recorded in the Treasurer's report are for the prosecution of research. Amongst these is the gift from an anonymous friend for sanitary research work; from a member of the Corporation tor research in applied chemistry; from several contributors to the fund of seismological research; from Dr. Charles Weld for research in naval architecture; and from Dr. Noyes for research in the department of physical chemistry. One of the most gratifying of the gifts is that from Mrs. William Barton Rogers, whose interest in and enthusiasm for the Institute could not have been greater when it was founded by her husband nearly half a century ago. The largest item on the Treasurer's list of gifts is that of over $40,000 from the Alumni Fund. This, of course, has been contributed, not by one individual, but by a large number of the alumni.

### Relation with the Alumni.

There have been many proofs during the year of the continued and increasing interest of the alumni in the welfare of their Alma Mater. The contribution towards the alumni fund, to which reference has just been made, was a practical demonstration of allegiance which has greatly helped the Institute at a critical stage of its development. Indeed, but for such support it would have been impossible to carry on the work without a very serious diminution of efficiency. The great reunion of the alumni in June surpassed anything of its kind in the history of the Institute, both in the magnitude of the gathering and the intensity of loyalty and enthusiasm displayed by those who came. As the success of the Institute must depend in large measure on the attitude of the alumni, any movement that tends to bring about a closer relationship between the alumni and your Corporation must be of interest to this body. During the last year an important change has been made in the constitution of the governing body of the Alumni Association, which has become more truly representative in character. By the new constitution an Alumni Council has been established, to which the Corporation might appropriately refer any question with reference to which an authoritative expression of opinion on the part of the alumni might be desired. This Council may also render great assistance to the administration by considering various problems of interest to the Institute and reporting the views of the alumni as to the best method of dealing with them. At the first meeting of the Council, committees were set up at the suggestion of Dr. Noyes, then Acting President of the Institute, to consider the following questions: the establishment of a camp for the summer school of civil engineering; the equipment and instruction in refrigerating, gas engineering, and aeronautics; the foundation of scholarships to connect the Institute with the more important high schools in this section of the country; the development of a research laboratory of engineering; the establishment of a committee on Student Welfare.

### Society of Arts.

With regard to the Society of Arts, I am pleased to be able to report that there has been a gratifying revival of interest in its proceedings. This Society has played a conspicuous part in the educational development; but like other similar societies elsewhere it has suffered in its popularity by the change of conditions since its foundation. The interest in science has not diminished; on the contrary, it is intenser and more widespread; but science has become much more specialized. This has led to the establishment of numerous technical societies dealing with special branches of science, and the proceedings of these societies attract the attention and monopolize the time of a large number of those who are most seriously interested in science and its applications. Apart from this, there has been a marked falling off of the "lecture habit" in most communities in which a generation ago lectures by competent men attracted a great deal of attention. If the recent revival of popular interest in the proceedings of the Society be maintained, it will, of course, be an encouragement to continue the work on the lines that have been followed so long. Unless, however, this be the case, the Society will doubtless divert its energies into some different channel. The next few years will therefore be critical ones in its history.

### Policy for the Future.

As to the future policy of the Institue as a whole, there seems no call for radical change as regards its educational methods or its films and ideals. It has had the great advantage of having been started on a broad gauge and kept thereon by a long succession of broad-minded instructors and administrators. For sime time its combination of liberal and professonal studies and its emphasis on science as a means of culture were regarded as experiments in the world of education. The experimental stage, however, has long since been passed; and the type of education initiated here has conclusively proved its usefulness. As far then as internal management is concerned our problem presents no peculiar difficulties. We have merely to continue along the natural lines of development and do all we can to secure the best type of instructors and maintain the highest possible standard of scholarship and technical skill. If we do this, we will continue to render a great service to the state and to the country as a whole.

Amongst the features of the Institute that are specially encouraging in the outlook on the future may be mentioned the peculiar devotion of the Faculty and of the alumni. In the short time that I have occupied the office of President I have had several opportunities of observing the readiness with which members of the Faculty sacrifice their financial interests through their belief in and loyalty to the Institute. Moreover, the number of the students is very encouraging, especially when we consider the relatively high fees that we are forced to impose in order to maintain our standards of efficiency. Here we have no problem of staying th decline of an institution that is running down, for the number of our students is as large as we can accommodate. What is still more important is that the quality of the students is excellent; for, after all, in an educational mill the great thing is to get good grain. The students that come to us are nearly all young men of character and grit, just of the type for whom careers of usefulness and success can be most confidently predicted. I may add that one of the chief assets of the Institute is the tradition of seriousness of purpose and hard work on the part of the students. It is certainly a tribute to Rogers' wisdom that the school that he founded has succeeded so easily, one might say inevitably, in avoiding the more serious problems of discipline, the abuse of athletics, and the various other difficulties that have long been pressing so hard on many of the colleges throughout the land, and of late have been causing so much disquietude both within and without these colleges. It is scarcely necessary to say that the prestige of the Institute must prove invaluable to it in facing the difficulties of the future. It is known and respected throughout the world as one of the pioneers in the field of education that it occupies and as one of the most successful today in maintaining the highest standard in the training of engineers and of architects. Its graduates are eagerly sought for to fill imporant positions all over the world, and now, as formerly, every head of a department reports that far more graduates are applied for than can possibly be supplied. Then, although it has not as yet the financial resources that are needed for its development, the Institute is fortunate in having large assets and in being entirely free from debt.

### The Need of Further Endowment.

I mention these encouraging features because I think it well that we should all realize that the one thing needful is further endowment to enable the Institute to take up new work and to improve the conditions of the old. This claim for new endowment is unfortunately a commonplace of presidential reports, but it is none the less pressing because of its commonplace character. It will be seen from the Treasurer's report that we have this year a real deficit,—a real excess of expenditure over income. This is the case in spite of the greatest care in keeping expenses as low as is consistent with the high standards that we endeavor to maintain. Besides this, it has been recognized for long that we have not sufficient means to develop naturally, and that the quality of the instructors that we can employ must inevitably deteriorate if we can not meet the increased cost of living by the payment of better salaries. In many respects the salaries that we pay compare very favorably with what is the best practice in this matter in the country. Our peculiar weakness is in our middle men, on whom a large share of the burden of teaching falls. These men are eagerly sought to fill higher positions in similar institutions elsewhere; and, although we should always welcome their promotion, we should be able to get the best of them back if we need their services later; or if we cannot get them, we should be able to get men of equal grade. To make this possible, further endowment is indispensable. It is to be hoped that this will come from public-spirited citizens; but it is also, I think, to be hoped that an effort will be made to secure more support in this direction from the State. No one who has looked into the matter can fail to recognize the great service that this Institution has already rendered to the State, and still more he greater service that it can render in the future if not allowed to languish by insufficient support. At present it receives an annual grant of $25,000 from the State of Massachusetts, which is not a twentieth part of its annual expenditure. Such a grant to such an institution seems absurdly inadequate, especially in view of what other states are doing. We have only to look to the western states of this Union to see how differently matters are being dealt with elsewhere; and the zeal for technological education on the part of the State is certainly not confined to this Union. A recent visit to Europe has made it evident to me that many of the states of the old world that have been slow to recognize the needs of the age are rapidly making up for lost ground. It would be peculiarly unfortunate if Massachusetts, which was a pioneer in the matter of state support for this type of education, should be left behind in the race.

### The Problem ofa New Location.

The problem of securing increased endowment is not the only serious one that confronts us. We must find a new location for the Institute. The need for such a change was urged in his annual reports by Dr. Pritchett for years, and Dr. Noyes last year summed up the matter thus: "There has grown up not only amongst your own members, but amongst all other groups of men connected with the Institute,—Faculty, Alumni, and Undergraduates,—a sentiment so strong that it will be satisfied with nothing less than the creation of a new Insitute on a new site." The situation must therefore be familiar to every member of your Corporation, and it can not be necessary for me to do more than briefiy recapitulate the desired change.

1. The present site, although conveniently situated, is noisy, dirty, and subject to mechanical and electrical disturbances which interfere with its efficiency as an educational machine. It is cut up into a number of sections at a considerable distance from one another, separated by busy streets; and no land is available in the immediate neighborhood of any of these sections except at a prohibitive price.

2. The present buildings are overcrowded, the need for more room being a constant source of complaint from heads of departments in their reports. Devices of all sorts have been adopted to economize space, with results that are for from satisfactory and seriously hamper the proper development of the Institute.

3. The buildings are scattered in such a way as to necessitate a separation of department, which for convenience of teaching should be closely associated.

4. This overcrowding and scattering of buildings not only limits the efficiency of the Institute, but robs it of the outward dignity of a great educational institution. It should be part of the education of an engineer or an architect to be brought up under conditions that impress him with the dignity of his profession; the lack of such conditions, not only acts unfavorably on the student, but reacts on the public. It fails to attract their attention to the importance of the Institute and the claims that it has on their support.

5. The older buildings have reached a stage when repairs of all sorts are necessary and great expense is incurred in their maintenance. In many respects they have grown out of date; for example, they are not ventilated by modern methods.

6. The newer buildings are mostly temporary in their structure and are beginning to reach the limit of age for which they are designed.

7. It is difficult, if not impossible, under the present surroundings to provide properly for the physical and social development of the students.

8. The unfavorable conditions that exist today will be so aggravated within the next ten years that removal will then be inevitable and the Institute will be forced to a suburban location far removed from the center of the city,—a result which is almost universally admitted to be undesirable.

9. The expense of making proper provision upon the present site for the development immediately demanded is very large; and although it is less than that of removing to a new site, yet the difference is probably more than compensated by the greater ease of securing funds for the execution of a well-considered, consistent plan for rebuilding the Institute upon an attractive location.

10. In order that the prestige of the Institute may not suffer through the prevalence of the idea that it is resting upon its laurels, and in order to meet the competition arising from the development of similar schools throughout the country, it is important that some decisive and impressive step be taken as speedily as possible. The Institute needs a new site and new equipment, in order to maintain its position as a scientific school of the front rank and as the leading representative in the world of a characteristic form of combined liberal and professional education.

As to the requirements of a new site it is obvious that the site should be of sufficient area to make provision for the probable advancement in the next generation. It is difficult to see eve

so far into the future as to say definitely what this area should be. Having regard, however, to what is deemed necessary elsewhere, it would seem that twenty-five acres is a minimum. Then the location should be worthy of the dignity of a great educational institution whose work should be recognized as of the very highest importance to the welfare of the state. The site should be such that students' houses or dormitories could be erected near at hand. Especially at an institution like this, which draws such a large number of its students from a great distance, there must always be a great many who do not live at home. Whatever may be the difficulties in the successful management of students' houses, there can, I think, be no doubt that they are infinitely to be preferred to the cheap lodging-houses to which the circumstances of so many of our students force them to resort. Living in such houses is not only bad for the health, but it deprives the student of the social advantages which he ought to reap by being a member of a community so cosmopolitan in its character as is the Institute of Technology. Another requirement of the new site is that it should be as accessible from the various railroad stations in Boston, so as to enable those who want to live at home to do so. There are already a large number of these coming to the Institute from all directions around Boston. It would, I think, be extremely unwise to completely change the character of the Institute by forcing all ts students into dormitories. Lastly, the site should be as near as possible to the center of Boston, so that that it should be as accessible as possi- close contact might still be maintained with the various professional, industrial, and business activities of the city.

A special committee has been engaged during the year in considering the relative advantages and disadvantages of a large number of sites. Many of these are eliminated by consideration of the requirements that. have been indicated above. But there are three or four left that would satisfy most of our needs. The problem of final selection will doubtless be affected largely by the consideration of the cost. The financial burden of a change is a heavy one; for the total sum required to rebuild, re-equip, and make growth possible by increased endowment involves millions. The Institute is national in its scope and in its services, and so may reasonably look for help in many quarters. But its chief reliance must probably be on Massachusetts; and the citizens of Massachusetts who are interested in education have many calls on their generosity. It may be said that it is to their alumni that most American institutions look for their chief support; but the alumni of the Institute do not as yet for a large or a wealthy body. Most of them are men who have had to make their own way in the world, and this is a process in which time is a very important factor. It is a striking proof of the rapid development of the Institute within recent years that half of its graduates have received their degrees within the last ten years. These men are enthusiastically loyal and will doubtless help us largely in the time to come; but we can not reasonably expect very much from them as yet.

I mention all these discouraging features of our situation, not from any feeling of pessimism as to the future; indeed, nothing could be further from the fact. I realize that most of the Institute's difficulties are due to its success and not to its failure, and I believe that a splendid future is assured to it if, at this critical stage of its history, it does not falter through lack of courage. It seems to me that when the opportunity arises it should sell that part of its property which is unrestricted—that is, all except the Boylston Street property,—and with the proceeds secure a new site. It should then throw upon the public the burden of completing the purchase money of this site, if any complement be required, and of putting up new buildings and improved equipment. The Boylston Street property could be retained for carrying on that part of the work that can with the least inconvenience be separated from the rest until the time comes when restrictions upon its use can be removed at a reasonable cost. Such a policy involves some risks; but these are almost as inevitable to a progressive educational institution as to a progressive business. The question whether the risk is one that can reasonably be taken is, of course, a question for the individual judgment. My own opinion is that the risk is not great, provided only we have the co-operation of all those interested in the Institute. It is scarcely necessary to add that the question of the future location of the Institute is one that should be settled as promptly as possible. It has been before your Corporation for many years. If it were settled, the Institute could devote all its energy to the really great work of developing its educational resources; for, of course, its primary and fundamental problems are, and must always remain, educational.

### Co-operation With Neighboring Institutions.

Of the larger questions of future policy not already touched upon in this report, probably the most important is the question—how far can we profitably co-operate with other educational institutions in our neighborhood? Waste of effort is regrettable anywhere; in educational institutions it is more than regrettable—it is a deliberate sin against the light. Every educated man must know that the record of progress is largely the history of the elimination of waste; and every institution of learning has the duty imposed upon it of avoiding waste wherever possible. In our own field of technological education it does not require any remarkable powers of prevision to foresee that the burden of keeping up to the growing needs of the day will become heavier in each department. Then as science advances more and more and gradually invades new territories, as inevitably it must, the field of activity of a school of applied science will be greatly extended. Thus an institute of technology will have to cultivate a wider area and cultivate it more intensely than in the past. All this will make the task of conserving all its powers as much as possible a still more imperative duty. The practical questions are: Have we now reached the stage when co-operation is expedient; and, if so, how can this co-operation be most effectively undertaken. After a preliminary survey, the only question in my mind is as to the best means of co-operation. This is a problem of some difficulty and delicacy and one that can not be solved satisfactorily without care and patience. At present I can only say that I shall give it my earnest attention in the immediate future.

RICHARD C. MACLAURIN.

---

—"Dad and the Frats" is the name of a college satire to be produced at the University of Kansas this month.

---

The Princeton University library has recently received from an alumnus two manuscripts, one in Greek and the other in Armenian. The former is a beautifully executed liturgy, written probably between the years 1100 and 1300.

# WIRELESS STATION IS NOW IN OPERATION

## U. S. Weather Report Received and Other Interesting Messages---Interest Keen

Brizz—brizz—brizz came in over the phones at the Wireless Societies station last night. Every body in the station held his breath. It was a interesting crowd, all captured by the weidness of the new method of transmitting intelligence. The U. S. Weather Report, said E. H. Guilford, who was at the apparatus. "She's coming in good tonight" and then he turned to his copy paper and scratched off the following:

U. S. Weather Report, via Wireless.

"New England, Fair, somewhat colder tonight, Friday, fair, with continued cold. Light to moderate west winds.

"Forecasts for Boston and vicinity,—Fair, with somewhat colder, light to moderate west winds.

"All steamers departing for European points will meet with moderate westerly wind, with fair and colder weather to the Grand Banks."

A portion of the receiving apparatus is now in full operation and visitors have been flocking to the station all the morning and evening to take a lock at the systems.

A meeting of the society will be held this afternoon at 4.00 P. M. in 11 Eng B. and new members will be voted in and shingles given out at this time. A talk will be given about the apparatus and methods of operation so as to familarize the men with the receiving of messages as soon as possible.

---

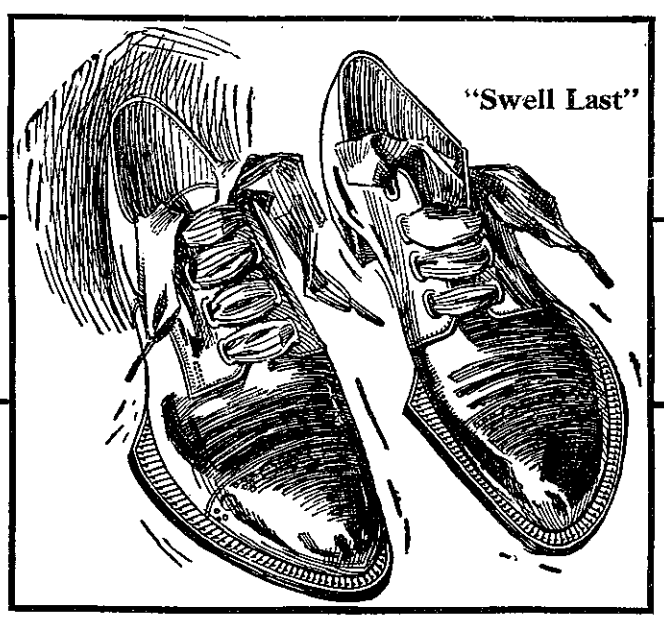
—Undergraduates in the University of Minnesota whose professor kept them overtime brought an alarm clock and set it for the end of the hour. The professor discovered it, secretly turned on the silencer and blandly went on with the lecture.

---

—A Westinghouse Air Brake Company representative spoke at Harvard last week on "What Stops a Train."


# SHOES FOR TECH MEN

Coes and Stodder




14 School St: Boston

A cut of one of our lasts used for double sole oxfords

Every style sanctioned by good taste and adopted by wearers of high-grade goods; carried in stock and shown in their proper seasons.

**STYLE 778**
**Black Cordovan,** Blucher Oxford, double sole . . . . **$6.50**

**STYLE 776**
Dark **Brown Cordovan,** Blucher Oxford, double sole . **$7.50**

**STYLE 788**
French **Patent Calf,** Blucher Oxford, heavy single sole . **$6.50**

**STYLE 791**
Russet **Russia Calf,** Blucher Oxford, double sole . . . . **$7.00**

## MODERN VS. GOTHIC

Stating that it is as ridiculous to say that any certain building shall be built according to some given style as to rule that women shall all dress in the same style, Henry Hornbostel, a New York architect, in his talk before the Architectural Society at the Union last evening, urged upon his audience that to become successful architectural designers "they must avoid all foolish masquerade and foolish rules and science and stive for charm and beauty."

He said, "If a building is beautiful and pleasing we will forgive it all its faults, just as we men forgive a woman anything if she is beautiful."

Mr. Hornbostel announced his subject as "Gothic Architecture," saying that in self-defence he would talk from the standpoint of a critic and not as an architect. Gothic architecture, however, was used only as the example from which the speaker drew his points as to the foolishness of trying nowadays to build a building in exactly the same spirit and style that a similar building was erected centuries ago.

Modern America demands a modern architecture, and to build a church in this unreligious age in the Gothic style, Mr. Hornbostel branded as ridiculous. When Gothic cathedrals were erected, the Franch nation was seized with religious fanaticism. Each little town gave up all ordinary pursuits and turned church-builder. Agriculture and industry came to a standstill, and when the church was finished the town was dead.

To design a modern church as exactly Gothic as it can be made, the speaker declared was an irrational step in this rational age. If, however, the architech designs a modern church and gave it a little of the feeling and expression which the old cathedrals possess, then he is doing the correct thing.

## COMMUNICATION

Editor of The Tech:
Dear Sir,

Friday is not the easiest night in the week for all Institute students and therefore not the most convenient dinner night for all. Assuredly, this is not the most convenient for those whose religion forbids the eating of flesh-meat on Friday. But, after all, a man's attendance at a diuner does not depend wholly on the amount of work he has for that particular evening, but rather on his own willingness to work ahead in order to make that evening convenient.

That another evening may easily be substituted for Friday is shown by the dates selected for the dinner of the class of 1913 and of the Pennsylvania Club.

Merely because a thing has become more or less of a custom is no reason to continue it when there is sufficient cause for a change; and opposition to a change which will work no hardship on one's self and which at the same time will be of decided advantage to another, seems foreign to the make-up of a broad-minded man.

The question as to whether or not the eating of meat on Friday is detrimental to the welfare of the community or the individual does not enter into this discussion at all and the remark of this nature in a recent communication was not apropos, to say the least.

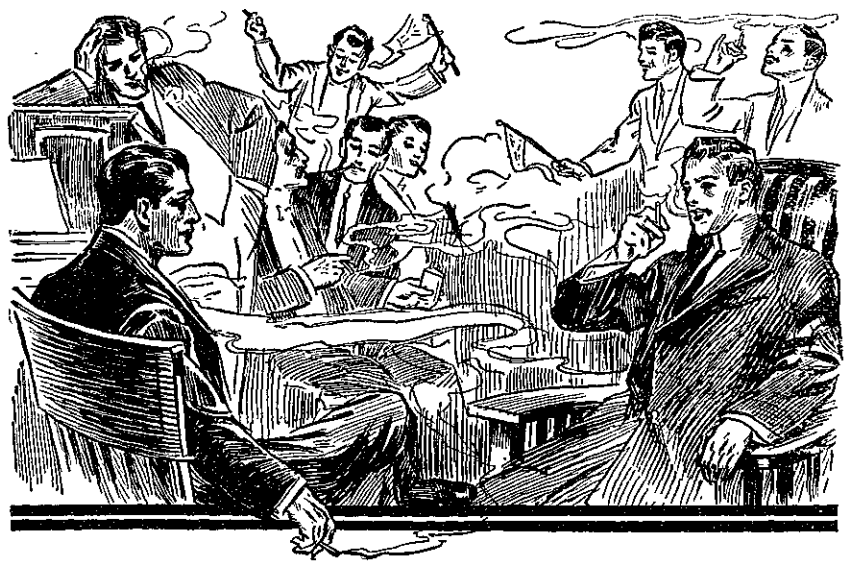
Let dinner committees honestly consider other nights as possible dinner nights, and if they then still consider Friday as most suitable, at least let them make some provision for those who simply live up to their religion in abstaining from flesh-meat on that day.

This communication is directed at no dinner committee in particular, but is simply a Catholic student's view of Friday as a dinner night.

Arthur T. Bennis, 1912


**MORSE & HENDERSON**
**TAILORS**
**18 BOYLSTON STREET, - - - BOSTON**
Tel. Oxford 99 Rooms 14-15.
THE LATEST NOVELTIES FOR FALL AND WINTER FOR COLLEGE MEN.

**FATIMA TURKISH BLEND CIGARETTES**
**20 for 15 cts.**



Smoke. Reminiscences. Clever stories. All good fellows. Cigarettes in order. Of course they're Fatimas.

The mild flavor climaxes the climax. The rare blend of Turkish tobacco just suits. The mellowing process has made it perfection.

The package is economical and you get ten extra cigarettes.

THE AMERICAN TOBACCO CO.

**Fall Clothes**
FOR GENTLEMEN
Highest Order of Tailoring, yet Ready to Slip Into.
**Suit or Overcoat $25 to $50**
FINEST OF FURNISHINGS, ALSO
**Ely Meyer & M. C. Simon**
T. Henry Clarkson, Manager.
WASHINGTON AND FRANKLIN STREETS.

**Preston's Coffee House**
Open All Night.
1036 BOYLSTON STREET, BOSTON
Telephone 2206-1 B. B.

**VISIT THE NEW STORE**
BUILT ESPECIALLY FOR YOU.
DRAFTING INSTRUMENTS, PAPERS, TRACING CLOTH, TRIANGLES, T SQUARES, SLIDE RULES, PENCILS, ETC. PAINTS, VARNISHES AND HARDWARE.
At Lowest Price
210 CLARENDON ST.
ALSO
82 and 84 WASHINGTON ST.
Catalogues Free
**Wadsworth, Howland & Co.**
Incorporated

**SMULLEN & CO.**
**TAILORS**
51 SUMMER ST., cor. Chauncey St.
Highest Grades : Popular Prices

**McMORROW**
**College Shoes for College Men**
238 Washington Street, Boston, Mass.
OPPOSITE YOUNG'S HOTEL

**Castle Sq.** Daily 2 and 8 Tel. Tremont 5
John Craig Stock Co. in
THE TAMING OF THE SHREW
Prices 15c., 25c., 50c., 75c.
Down-town Ticket Office, 15 Winter St.

**HERRICK** TICKETS ALL THEATRES
COPLEY SQUARE
Telephones 2329, 2330 and 2331 BackBay

**THE OLD CORNER BOOKSTORE**
Headquarters for all
Student Text Books
27 and 29 Bromfield Street
BOSTON
Tel. Main 4706.

**ROWAN & CURRY**
THE TECH BARBERS
Special attention paid to students at M. I. T.
In the New Chauncey Hall Building
585 BOYLSTON STREET
Opp. Copley Square

**GEO. H. ELLIS CO.**
**Printers**
No. 272 CONGRESS STREET
BOSTON, MASS.
Phone' 1549.

**ODIN FRITZ**
PHOTOGRAPHER,
Calls special attention of Technology students to the excellency of his work.
304 Boylston Street.

**HIGGINS'**
Drawing-Inks
Eternal Writing-Ink
Engrossing-Ink
Taurine Mucilage
Photo-Mounter
Drawing-Board Paste
Liquid Paste
Office Paste
Vegetable Glue, Etc.

*Are the Finest and Best Inks and Adhesives.* Emancipate yourself from the use of corrosive and ill-smelling inks and adhesives and adopt the *Higgins Inks and Adhesives.* They will be a revelation to you, they are so sweet, clean, and well put up.
*At Dealers Generally.*
CHAS. M. HIGGINS & CO., Mfgrs.
Branches: Chicago, London
271 Ninth Street, Brooklyn, N.Y.

Fall and Winter Novelties
**C. A. Patten & Co.**
MERCHANT TAILORS
43 Tremont St. Carney Bldg.
Nobby Suits at Popular Prices

**Miss M. F. Fiske**
THE RED GLOVE SHOP
322 Boylston St., opp. Arlington
is showing a handsome shade in men's chamois gloves at $1.50 a pair. Other makes at this price are Fownes and Dent's in the popular cape leather in handsome shades of tan.

THE TECH
has Credit, that will be sold at a discount, with stores selling the following articles

Men's Furnishings
Tailors
Shoes
Hotel Due Bills
Fountain Pens

The Tech
Offers Opportunities for Mutual Benefit In the Competitions for the Various Offices
IN NEWS ADVERTISING AND CIRCULATION

Those in charge of each of these departments can be found in THE TECH Office from 8:30 to 9:00 daily.

"A MAN ONCE STOOD ON LONDON BRIDGE SELLING GOLD SOVEREIGNS FOR A SHILLING APIECE."

COME AND BUY.

Tech Union.

STATIONERY

Fraternity Stationery.
Engraved Invitation,
Reception and Visiting Cards.
Banquet Menus.
Coats of Arms, Crests and Monograms.
Students' Supplies.

Ward's SAMUEL WARD CO., 51-63 Franklin St., Boston.

COLLINS & FAIRBANKS CO.
YOUNG MENS HATS
FOR ALL OCCASIONS
381 Washington St. Boston

## GENERAL NOTICES.

One comfortable, home-like room. Heat, continuous hot water and bath. Call or address, Mrs. A. P. Titzer, 74 Batavia Street, Suite 3.
(21) (62,63,64.)

To let, 2nd story front room for one student. $4.00 per week. Mrs. Elizabeth Eustace, 134 St. Botolph Street.
(22) (62)

**Names Posted.**

The names of officers of Technology organizations, are posted on the Institute Committee's bulletin board in the Union Social Room. Send corrections to Kerr, the Cage.

**C. E. Society Dinner.**

At the Union, Tuesday, Dec. 14, at 6.30 P. M., sharp, Prof. Fay will talk on "Causes of Failure of Structural Materials."

**1910.**

Class meeting Friday, Dec. 10, in Huntington Hall at 1 o'clock. Everybody come. 59.60.61.62

**1911.**

Ballots for the Junior Prom. Committee election were mailed yesterday. Any men who did not receive them at heir home address, will doubtless find them at the Cage. If not, ask Charlie for a ballot.

Remember that the polls close Thursday, Dec. 9, at 4.00 P. M. Don't forget to vote!

Third year Heat Problem Books have been returned and will be found on the table in the lower corridor in Walker.

**1913.**

Tickets for the 1913 Class dinner will be on sale at the Union between 1 and 2 today.. 59.60,61

Football team meet at Marceau, the photographer, 160 Tremont St., at 3.20 P. M. Wednesday, Dec. 15th. Bring football togs.

**LOST.**

At Gym Tuesday, Dec. 7, stick pin, bearing initials R. G. D. Will finder please leave at Cage for
R. G. DAGGETT.

## 1913 DINNER AND PIPES

The freshman class pipes have arrived and will be distributed at the dinner next Thursday evening There are many reasons for putting off the date of distribution until this time. In the first place, it is the opinion of many in the freshman class that the victory on Field-Day was never properly celebrated and it was suggested by some members of the 1913 class that the pipes be formally lighted on the night of the dinner. The committee in charge of the 1913 class pipes have reported a very small sale so far, due to the lack of interest of the 1913 men, or as somebody suggested, they are too young to smoke yet. The pipes cost $2.85 and $3.45 and are well worth the price asked. They are straight stem, B. B. B., round bowl, and are very attractive in appearance. So far only fifty have been sold among a class of 400 students. The committee has disbanded and further orders will be taken by N. Eichorn. The pipes will be given out at the freshman dinner.

THE NEW AMERICAN HOUSE BOSTON
VISIT THE RATHSKELLER
A homelike, first-class hotel, proud of New England traditions, dating from Gen. Warren, yet newly furnished with every comfort & convenience
Long distance phone and hot and cold water in every room. Kept constantly clean by our vacuum plant. Rooms $1.00 a day and up.

J. C. LITTLEFIELD
HIGH CLASS TAILOR
Smart and effective fabrics; the latest texture and the most fashionable shades; prices that are right.
DRESS CLOTHES A SPECIALTY.
12 Beacon Street, Boston

P. H. McNEIL,
Razor Blades Sharpened.

BACK BAY BRANCH
State Street Trust Co.
130 MASSACHUSETTS AVENUE, BOSTON
Credits interest monthly on accounts of $300 and over.
MAIN OFFICE: 32 STATE STREET

## CLASSIFIED LIST OF ADVERTISERS

ATTRACTIONS.
Castle Square Theatre.

BARBERS.
Rowan & Curry.
M. J. Hannigan.

BANKING HOUSES.
Old Colony Trust.
State Street Trust Co.

BOOKSTORE.
Old Corner Bookstore.

CIGARETTES.
Fatima.
Tasha.
Cobb, Bates & Yerxa.

CONFECTIONERY.
Apollo Chocolates.
Copley Square Drugs.

DRUGGISTS.
Copley Drug.

ENGINEERS.
Stone & Webster.

GLOVES.
Miss Fiske.
Fownes.

HARDWARE.
Wardsworth & Howland.

HATTERS.
Collins & Fairbanks.
Sphinx.

HOTELS.
Hotel Brunswick.
Hotel Cumberland.
American House.

JEWELERS.
Bent & Bush.

MEN'S FURNISHINGS.
Arrow collars.
Boston Garters.
Collins & Fairbanks.
Morse & Henderson.
C. F. Hovey & Co.
Ely Meyer & M. C. Simon.
Richardson's.
Noyes Bros.
Shuman & Co.
J. C. Littlefield.

PHOTOGRAPHERS.
Odin Fritz.

PRINTERS.
Geo. H. Ellis Co.

RESTAURANTS.
Copley Lunch.
Lombardi Inn.
Petit Lunch.
Preston's Coffee House.
Boston Dairy.
Landers Lunch Room.
Union Dining Room.

SHOES.
McMorrow.
Coes & Stodder.

SPORTING GOODS.
A. G. Spalding.

STATIONERS.
Faber Pencils.
Higgins' Ink.
Maclachlan.
Moores Pens.
Samuel Ward Co.

THEATER TICKETS.
Herrick.

TYPEWRITING.
Miss Sawyer.

TYPEWRITERS.
Model Typewriter Exchange.

Tel. 1597-1 B. B.
MISS SAWYER
MULTIGRAPHING
TYPEWRITING
486 BOYLSTON ST., Opp. Rogers Bldg.

Trinity Court Petit Lunch
Menu, Friday, Dec. 10, 1909.
New York Clam Chowder.
Consomme Juliette.
Fried Scallops.
Baked Stuffed Deep Sea Bluefish, a la Porto Rico.
Fricasee of Lamb, with Green Peas.
Veal Chops, Breaded, Tomato Sauce.
Boiled Corned Shoulder, with Spinach
Imported Frankfurts and Potato Salad.
Roast Ribs of Beef. Roast Venison.
Baked Macaroni, au Gratin.
Pastry or Coffee.
20 Cents.